

trimethylolpropane by extraction and distillation, said process for recovering ditrimethylolpropane comprising:

A1  
subjecting a formal compound contained in a still residue of the distillation to acid decomposition, and,  
after said subjecting, recovering ditrimethylolpropane from the still residue.

4. (Amended) A process according to Claim 1, comprising the steps of:

A2  
i) subjecting the still residue to the acid decomposition of the formal compound;

ii) removing high-boiling components having a higher boiling point than that of ditrimethylolpropane, by distillation, from the still residue; and

iii) subjecting the resultant products of ii) to crystallization using solvent.

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6. (Amended) A process according to Claim 1, wherein prior to subjecting the formal compound to the acid decomposition, high-boiling components having a higher boiling point than that of ditrimethylolpropane are removed from the still residue, and resultant product from the acid decomposition is subjected to crystallization using a solvent.

8. (Amended) A process according to Claim 1, wherein the still residue is first subjected to crystallization using a solvent, to form a resultant crystallized product, and then the formal compound contained in the resultant crystallized product is subjected to said acid decomposition; and resultant reaction mixture obtained from the acid decomposition is subjected to crystallization.

9. (Amended) A process for recovering ditrimethylolpropane by-produced when producing trimethylolpropane by reacting n-butyraldehyde with formaldehyde in the presence of a basic catalyst, and then separating trimethylolpropane by extraction and distillation, said process for recovering ditrimethylolpropane recovering the ditrimethylolpropane from a still residue of said distillation, and being performed by steps comprising:

removing high-boiling point components having a higher boiling point than that of ditrimethylolpropane, from the still residue of said distillation by molecular distillation, thereby forming a resultant product; and

subjecting the resultant product to crystallization using a solvent.

Please add the following new claims to the application:

--12. A process according to Claim 1, wherein high-boiling components having a higher boiling point than that of ditrimethylolpropane are removed from the still residue prior to subjecting the still residue to the acid decomposition.

13. A process according to Claim 4, wherein high-boiling components having a higher boiling point than that of ditrimethylolpropane are removed from the still residue after the acid decomposition.

AS 14. A process according to Claim 1, comprising the steps of:

i) subjecting the still residue to acid decomposition of the formal compound;

ii) removing high-boiling components having a higher boiling point than that of ditrimethylolpropane, by distillation, from the still residue; and

iii) subjecting the resulting products of ii) to distillation for removal of low-boiling components.

15. A process according to Claim 14, comprising the further step of performing crystallization, using a solvent, after the removal of the low-boiling

components by distillation, in step iii).

16. A process according to Claim 14, wherein high-boiling components having a higher boiling point than that of ditrimethylolpropane are removed from the still residue after the acid decomposition.

AS 17. A process according to Claim 1, wherein the still residue, after the acid decomposition, is subjected to neutralization.

18. A process according to Claim 9, wherein the resultant product contains substantially no bis-trimethylolpropane, and the solvent used in the crystallization is an organic solvent.--